

Response under 37 CFR §1.116
U.S. Patent Application Serial No.: 09/420,806
Attorney Docket No.: 991206

REMARKS

Claims 1 - 12 are pending in the present application. By this Amendment, claim 1, 3, 9 and 11 have been amended. No new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated April 7, 2004.

Allowable Claim Subject Matter:

Applicants gratefully acknowledge the indication in item 5 of the Office Action that claims 4 - 7 would be allowable, if amended, to include all of the limitations of the base claim and any intervening claims.

However, for at least the reasons discussed below, it is respectfully submitted that all of claims 1 - 12 are allowable.

Claim Objections:

Claims 9 - 12 stand objected to in item 2 of the Action due to minor informalities. However, each of claims 9 and 11 has been amended to correct such informality. As such, withdrawal of this objection is respectfully requested.

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Claim Rejections under 35 U.S.C. §103:

Claims 1 - 3 and 8 are rejected under 35 USC §103(a) as being unpatentable over Miyake (U.S. Patent No. 5,767,904) in view of Horii (U.S. Patent No. 6,018,363).

This rejection is respectfully traversed.

According to the present invention, a timing signal is generated by a single generator, and exposure data is held in a first register. A timing generator periodically causes exposure according to the exposure data held in the first register, in response to the timing signal. Furthermore, a processor updates the exposure data held in the first register, at a first predetermined timing by counting the timing signal. Consequently, a subject is continuously shot with different exposures.

An exposing operation by the timing generator is carried out in response to the timing signal generated by the signal generator. Accordingly, it is impossible for the processor to control an exposure timing, and a processing timing of image data obtained by the exposing operation. However, because of the exposure timing being regulated by the timing signal, it is possible for the processor to grasp an operating state of the timing generator and a processing state of the image data. That is, with the timing signal clue to go one, the processor is able to grasp what operation is being carried out by the timing generator and what signal processing is being performed on the image data.

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Consequently, the present invention is updating the exposure data by counting the timing signal. The exposure data is to be updated at a suitable timing, taking the operating state of the timing generator or the processing state of the image data into account. Thus, each of the timing generator and the processor executes a processing of its own in reference to the timing signal, and therefore, high-speed continuous shots with different exposures are realized.

In contrast, while Miyake discloses a continuous picture-taking mode for continuously taking a picture of a subject, Miyake fails to disclose or remotely suggest anything about updating exposure data at every time a single picture taking operation is completed. Therefore, it is respectfully submitted that it is not possible to reach the present invention from Miyake.

Horii discloses a synchronous signal generator for generating a timing signal, while Horii fails to disclose or remotely suggest anything about an operation as continuously shooting a subject with different exposures. Accordingly, it is also submitted that is not possible to reach the present invention from Horii.

Regarding a combination of Miyake and Horii, no references disclose or remotely suggest anything about continuously shooting a subject with different exposures. Accordingly, it is respectfully submitted that even if Miyake and Horii can be combined, it is not possible to reach the present invention from the consideration, and therefore, the present invention is patentable.

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In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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